

## REMARKS

The Office action has been carefully considered. In the Office action, claims 1-10 and 13-37 were rejected under 35 U.S.C. § 103(a) as being anticipated by Applicants' Admission of Prior Art (hereinafter "AAPA") and Jue, U.S. Patent No. 6,567,931 (hereinafter "Jue").

By the present amendment, claims 1, 13, 20, 25, and 33 have been amended to more particularly point out and claim the subject matter of the invention and not for reasons related to patentability. Claim 36 was amended to correct a grammatical error and not for reasons related to patentability. Applicants submit that the claims as presented have been and continue to be patentable over the prior art of record. Reconsideration is respectfully requested.

Applicants thank the Examiner for the interview held (by telephone) on October 27, 2004. During the interview, the Examiner and applicants' attorney discussed the status of the application as well as the background section of the application and independent claims 1, 13, 20, 25, and 33 with respect to the prior art and enablement. The essence of applicants' position is incorporated in the remarks below.

Turning to the 35 U.S.C. § 103(a) rejections, the present invention generally relates to intelligent power management in computer-related devices. In an aspect of the invention, the present invention provides a method and system that solves the problem of interrupt storms by selectively enabling and/or re-enabling wake GPEs (General Purpose Events) received in a hardware register, such that a method associated with that wake event only runs when the software decides that it can run. The operating system thus intelligently manages wake GPEs, so that if a hardware device fails to properly clear a wake signal, the

computer system does not again process that wake signal, by running and re-running its associated method, essentially in an infinite loop. As part of this operation, the operating system may distinguish between events that are exclusively wake events versus events that are shared run-time and wake events.

In one implementation, at boot time, the ACPI driver uses an algorithm to examine the system tables / namespace (built from firmware information) to determine which GPEs are associated with wake events, either exclusively or shared with run-time events. The GPEs associated with wake events are managed differently from the GPEs received on other pins (which are managed according to the ACPI specification).

In general, after the operating system has determined which GPEs are run-time, wake only, or shared, when the operating system receives events in the GPE Status register for an enabled event, the operating system runs a method associated with that GPE. When the associated method has completed, the operating system selectively determines whether the event needs to be re-enabled. This is done (in part) by determining if the event is wake only, (e.g., via access and manipulation of the state information in the registers), and if there is no outstanding request for that event to wake up the computer. By selectively not re-enabling certain events, the operating system does not again process events that are not properly cleared by their corresponding hardware.

Note that the above description is for informational and example purposes only, and should not be used to interpret the claims, which are discussed below.

In contrast to the present invention, Jue is directed towards solving an entirely different problem from that solved by the present invention, essentially preventing false remote system wake events following alternating current (AC) power loss. To this end, Jue

provides a method whereby, “the operation of the BIOS to bypass wakeup processing when an invalid event causing a false wakeup command occurs.” Jue, column 5, lines 60-62.

Further, Jue states, “(a)t check for invalid events 310, invalid events possibly causing a false wakeup command are checked. Check invalid events 310 would check registers, such as power loss register 295 (shown in FIG. 2) and other known events that may trigger false wakeup commands. Decision 320 determines whether an invalid event condition has occurred.” Jue, column 5, line 60 - column 6, line 3. In other words, Jue discloses detecting and bypassing false remote system wake events utilizing the basic input output system (BIOS) and registers (e.g. power loss register 295) to determine whether the previous use of the computer system was halted due to a power loss situation.

Regarding the 35 U.S.C. § 103(a) rejections, by law, in order to establish *prima facie* obviousness of a claimed invention, all of the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). In addition, “all words in a claim must be considered in judging the patentability of that claim against the prior art.” *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). Jue clearly fails these requirements with respect to the claims.

Turning to the rejection of independent claims 1, 13, 20, 25, and 33 of the present invention, each of these claims generally recites the selective enabling and/or selective re-enabling of the wake events, which essentially allows software that includes a mask of bits representing events to intelligently control whether the method associated with a wake event will be run. Note that the Office action essentially contends that claims 13 and 20 are simply apparatus and data structure claims that perform the method steps of claim 1; applicants disagree, and submit that each of the claims should be examined on its own

merits. Notwithstanding, because Jue is so seriously deficient with respect to at least this recited subject matter, applicants will not separately point out the many other aspects of the claims that differ from Jue's teachings. Furthermore, Applicants' Background section (cited as Applicants' Admission of Prior Art [AAPA]) does not provide a cure to the deficiencies of Jue.

In contrast to the claims, Applicants' Background section is entirely silent as to the concept of selective enabling and/or selective re-enabling of the wake events via a software register that includes a mask of bits representing events. In fact, the Office action expressly concedes that "AAPA does not explicitly teach the wake event is selectively enabled/re-enabled. In other words [sic], AAPA does not teach the step of enabling *only a selected* wake event." Office action, sec. 7, pg. 3. Furthermore, Jue is entirely silent as to the concept of selective enabling and/or selective re-enabling of the wake events via a software register that includes a mask of bits representing events. The Office action expressly concedes that "[i]n other words, Jue teaches that enabling *only a selected* (standard wake command) wake event after an invalid shutdown event (col. 6, lines 11-18)." Office action, sec. 7, pg. 3.

Nevertheless, the Office action alleges that "[i]t would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of AAPA to enable/re-enable only a selected wake as taught by Jue." Office action, sec. 7, pg. 3. Such broad, conclusory statements do not come close to adequately addressing the issue of motivation to combine, are not evidence of obviousness, and therefore are improper as a matter of law. *In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). Applicants thus strongly disagree with this unsupported conclusion, and specifically

request that any claim rejections based on this statement be withdrawn, or submit that a reference or references in support must be provided, including a motivation to combine AAPA with Jue in a manner that would reach the claimed subject matter. See M.P.E.P. § 2144.03.

Moreover, the Office action does not provide any alleged motivation for modifying AAPA in combination with Jue in some way that would reach the claims, let alone provide any indication as to how such a modification might be accomplished, or why it might be desirable to do so. Instead, the Office action has merely repeated applicants' claim language, which is based solely on applicants' teachings, to contend that the claims are obvious, without providing any reasoning or other support.

It is well settled that in order to avoid an impermissible hindsight reconstruction of a claimed invention based on the applicants' teachings, to support a § 103(a) rejection, there must be some teaching, suggestion, or motivation other than applicants' teachings for modifying a cited reference (or combining references) to achieve the claimed invention. The prior art of record including Jue is entirely silent as to any such a modification, as is the Office action, and thus it is fully evident that the Office action could only have modified AAPA and Jue based on applicants' teachings, which is impermissible by law.

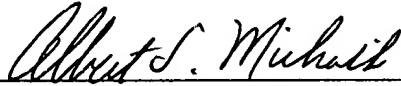
Furthermore, even if the references were somehow combinable in the manner suggested by the Office action (which they are not), they would still fail to teach applicants' invention as recited in claims 1, 13, 20, 25, and 33. At least for this additional reason, claims 1, 13, 20, 25, 33, and the claims that depend thereon are patentable over the cited references.

### CONCLUSION

In view of the foregoing remarks, it is respectfully submitted that claims 1-10 and 13-37 are patentable over the prior art of record. Applicants also respectfully submit that the application is in good and proper form for allowance. A favorable action on the part of the Examiner is earnestly solicited.

If in the opinion of the Examiner a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney at (425) 836-3030.

Respectfully submitted,



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CERTIFICATE OF MAILING

I hereby certify that this Amendment and Petition for Extension of Time, along with Transmittal are being deposited with the United States Postal Service on the date shown below with sufficient postage as First Class Mail in an envelope addressed to: Assistant Commissioner for Patents, Alexandria, VA 22313-1450

Date: December 31, 2004

  
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Albert S. Michalik

*2410 Second Amendment*